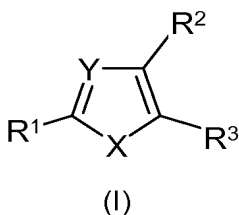


In the Claims

The listing of claims will replace all prior versions and listings of claims in the application.

Listings of claims

1 (original) A compound of formula (I):



wherein:

X is selected from NH, S and O;

Y is selected from CH or N;

R¹ is selected from cyano, isocyano, C₁₋₆alkyl, -NR¹¹R¹², C₁₋₆alkoxy, C₂₋₆alkenyl, C₂₋₆alkynyl, cycloalkyl, cycloalkenyl, aryl, and heterocyclyl, provided R¹ is not thienyl; and wherein R¹ may be optionally substituted on one or more carbon atoms by one or more R⁹; and wherein if said R¹ contains an -NH- moiety, the nitrogen of said moiety may be optionally substituted by a group selected from R¹⁰;

R² and R³ are each independently selected from -C(=O)NR⁶R⁷, -SO₂NR¹⁶R¹⁷, -NHC(=O)NHR⁴, and -NHC(=NR⁸)NH₂;

R⁴ is selected from H, OH, -NR¹¹R¹², benzyl, C₁₋₆alkoxy, cycloalkyl, cycloalkenyl, aryl, heterocyclyl, mercapto, CHO, -COaryl, -CO(C₁₋₆alkyl), -CONR³⁰R³¹, -CO₂(C₁₋₆alkyl), -CO₂aryl, -CO₂NR³⁰R³¹, -Salkyl, -SO(C₁₋₆alkyl), -SO₂(C₁₋₆alkyl), -Saryl, -SOaryl, -SO₂aryl, -SO₂NR³⁰R³¹, and -(C₁₋₆alkyl)SO₂NR³⁰R³¹ wherein R⁴ may be optionally substituted on one or more carbon atoms by one or more R¹⁵; and wherein if said heterocyclyl contains a -NH- moiety, the nitrogen may be optionally substituted by a group selected from R¹⁴;

R⁶ and R⁷ are each independently selected from H, OH, OCH₃, C₁₋₆alkoxy, -NH₂, -NHCH₃, -N(CH₃)₂, (C₁₋₃alkyl)NR¹¹R¹², -CH₂CH₂OH, cycloalkyl, and a 5, 6, or 7- membered heterocyclyl ring containing at least one nitrogen atom, provided R⁶ and R⁷ are not both H; alternatively R⁶ and R⁷ taken together with the N to which they are attached form a heterocyclic ring; wherein R⁶ and R⁷ independently of each other may be optionally substituted on one or more carbon atoms by one or more R¹⁸; and wherein if said heterocyclyl contains a -NH- moiety, the nitrogen of said moiety may be optionally substituted by a group selected from R¹⁹;

R^8 is selected from cyano, isocyano, $-\text{SO}_2(\text{C}_{1-6}\text{alkyl})$, $-\text{SO}_2\text{-aryl}$; $-\text{SO}_2\text{cycloalkyl}$, $-\text{SO}_2\text{cycloalkenyl}$, $-\text{SO}_2\text{heterocyclyl}$, and CF_3 ; wherein R^8 may be optionally substituted on one or more carbon atoms by one or more R^{23} ;

R^9 , R^{15} , R^{18} , R^{23} , R^{24} and R^{33} are each independently selected from halogen, nitro, $-\text{NR}^{30}\text{R}^{31}$, cyano, isocyano, $\text{C}_{1-6}\text{alkyl}$, $\text{C}_{2-6}\text{alkenyl}$, $\text{C}_{2-6}\text{alkynyl}$, aryl, cycloalkyl, heterocyclyl, hydroxy, keto(=O), $-\text{O}(\text{C}_{1-6}\text{alkyl})$, $-\text{Oaryl}$, $-\text{OCOalkyl}$, $-\text{NHCHO}$, $-\text{N}(\text{C}_{1-6}\text{alkyl})\text{CHO}$, $-\text{NHCONR}^{30}\text{R}^{31}$, $-\text{N}(\text{C}_{1-6}\text{alkyl})\text{CONR}^{30}\text{R}^{31}$, $-\text{NHCOalkyl}$, $-\text{NHCO}_2(\text{C}_{1-6}\text{alkyl})$; $-\text{NHCO}_2\text{H}$, $-\text{N}(\text{C}_{1-6}\text{alkyl})\text{CO}(\text{C}_{1-6}\text{alkyl})$, $-\text{NHSO}_2(\text{C}_{1-6}\text{alkyl})$, carboxy, $-\text{amidino}$, $-\text{CHO}$, $-\text{CONR}^{30}\text{R}^{31}$, $-\text{CO}(\text{C}_{1-6}\text{alkyl})$, $-\text{COheterocyclyl}$, $-\text{COcycloalkyl}$, $-\text{CO}_2\text{H}$, $-\text{CO}_2(\text{C}_{1-6}\text{alkyl})$, $-\text{CO}_2(\text{aryl})$, $-\text{CO}_2(\text{NR}^{30}\text{R}^{31})$, mercapto, $-\text{S}(\text{C}_{1-6}\text{alkyl})$, $-\text{SO}(\text{C}_{1-6}\text{alkyl})$, $-\text{SO}_2(\text{C}_{1-6}\text{alkyl})$, $-\text{SO}_2\text{NR}^{30}\text{R}^{31}$; wherein R^9 , R^{15} , R^{18} , R^{23} , R^{24} and R^{33} independently of each other may be optionally substituted on carbon by one or more R^{20} and on nitrogen of any moiety that contains an NH or NH_2 by R^{21} ;

R^{10} , R^{14} , R^{19} , R^{25} and R^{34} are each independently selected from halogen, nitro, $-\text{NR}^{30}\text{R}^{31}$, cyano, isocyano, $\text{C}_{1-6}\text{alkyl}$, $\text{C}_{2-6}\text{alkenyl}$, $\text{C}_{2-6}\text{alkynyl}$, aryl, cycloalkyl, heterocyclyl, hydroxy, keto(=O), $-\text{O}(\text{C}_{1-6}\text{alkyl})$, $-\text{Oaryl}$, $-\text{OCOalkyl}$, $-\text{NHCHO}$, $-\text{N}(\text{C}_{1-6}\text{alkyl})\text{CHO}$, $-\text{NHCONR}^{30}\text{R}^{31}$, $-\text{N}(\text{C}_{1-6}\text{alkyl})\text{CONR}^{30}\text{R}^{31}$, $-\text{NHCOalkyl}$, $-\text{NHCO}_2(\text{C}_{1-6}\text{alkyl})$; $-\text{NHCO}_2\text{H}$, $-\text{N}(\text{C}_{1-6}\text{alkyl})\text{CO}(\text{C}_{1-6}\text{alkyl})$, $-\text{NHSO}_2(\text{C}_{1-6}\text{alkyl})$, carboxy, $-\text{amidino}$, $-\text{CHO}$, $-\text{CONR}^{30}\text{R}^{31}$, $-\text{CO}(\text{C}_{1-6}\text{alkyl})$, $-\text{COheterocyclyl}$, $-\text{COcycloalkyl}$, $-\text{CO}_2\text{H}$, $-\text{CO}_2(\text{C}_{1-6}\text{alkyl})$, $-\text{CO}_2(\text{aryl})$, $-\text{CO}_2(\text{NR}^{30}\text{R}^{31})$, mercapto, $-\text{S}(\text{C}_{1-6}\text{alkyl})$, $-\text{SO}(\text{C}_{1-6}\text{alkyl})$, $-\text{SO}_2(\text{C}_{1-6}\text{alkyl})$, $-\text{SO}_2\text{NR}^{30}\text{R}^{31}$; wherein R^{10} , R^{14} , R^{19} , R^{25} and R^{34} independently of each other may be optionally substituted on carbon by one or more R^{22} and on nitrogen of any moiety that contains an NH or NH_2 by R^{23} ;

R^{11} and R^{12} are independently selected from H, $\text{C}_{1-6}\text{alkyl}$, cycloalkyl, aryl, heterocyclyl; alternatively R^{11} and R^{12} taken together with the N to which they are attached form a heterocyclic ring; wherein R^{11} and R^{12} independently of each other may be optionally substituted on carbon by one or more R^{33} ; and wherein if said heterocyclyl contains a $-\text{NH}-$ moiety, the nitrogen of said moiety may be optionally substituted by a group selected from R^{34} ;

R^{16} and R^{17} are each independently selected from H, OH, OCH_3 , $\text{C}_{1-6}\text{alkoxy}$, NH_2 , $-\text{NHCH}_3$, $-\text{N}(\text{CH}_3)_2$, $(\text{C}_{1-3}\text{alkyl})\text{NR}^{11}\text{R}^{12}$, $-\text{CH}_2\text{CH}_2\text{OH}$, cycloalkyl, aryl, or a 5, 6 or 7-membered heterocyclyl ring containing at least one nitrogen atom, provided R^{16} and R^{17} are not both H; alternatively R^{16} and R^{17} taken together with the N to which they are attached form an optionally substituted heterocyclic ring; wherein R^{16} and R^{17} independently of each other may be optionally substituted on one or more carbon atoms by one or more R^{24} ; and wherein if said heterocyclyl contains an $-\text{NH}-$ moiety, the nitrogen of said moiety may be optionally substituted by a group selected from R^{25} ;

R^{20} , R^{22} and R^{32} are each independently selected from halogen, nitro, $-NR^{30}R^{31}$, cyano, isocyano, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, aryl, cycloalkyl, heterocyclyl, hydroxy, keto(=O), $-O(C_{1-6}$ alkyl), $-O$ aryl, $-OCO$ alkyl, $-NHCHO$, $-N(C_{1-6}$ alkyl)CHO, $-NHCONR^{30}R^{31}$, $-N(C_{1-6}$ alkyl)CONR³⁰R³¹, $-NHCO$ alkyl, $-NHCO_2(C_{1-6}$ alkyl); $-NHCO_2H$, $-N(C_{1-6}$ alkyl)CO(C_{1-6} alkyl), $-NHSO_2(C_{1-6}$ alkyl), carboxy, $-amidino$, $-CHO$, $-CONR^{30}R^{31}$, $-CO(C_{1-6}$ alkyl), $-CO$ heterocyclyl, $-CO$ cycloalkyl, $-CO_2H$, $-CO_2(C_{1-6}$ alkyl), $-CO_2$ (aryl), $-CO_2(NR^{30}R^{31})$, mercapto, $-S(C_{1-6}$ alkyl), $-SO(C_{1-6}$ alkyl), $-SO_2(C_{1-6}$ alkyl), $-SO_2NR^{30}R^{31}$; wherein R^{20} , R^{21} and R^{32} independently of each other may be optionally substituted on carbon by one or more R^{26} and on nitrogen of any moiety that contains an NH or NH_2 by R^{27} ;

R^{21} , R^{23} and R^{35} are each independently selected from halogen, nitro, $-NR^{30}R^{31}$, cyano, isocyano, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, aryl, cycloalkyl, heterocyclyl, hydroxy, keto(=O), $-O(C_{1-6}$ alkyl), $-O$ aryl, $-OCO$ alkyl, $-NHCHO$, $-N(C_{1-6}$ alkyl)CHO, $-NHCONR^{30}R^{31}$, $-N(C_{1-6}$ alkyl)CONR³⁰R³¹, $-NHCO$ alkyl, $-NHCO_2(C_{1-6}$ alkyl); $-NHCO_2H$, $-N(C_{1-6}$ alkyl)CO(C_{1-6} alkyl), $-NHSO_2(C_{1-6}$ alkyl), carboxy, $-amidino$, $-CHO$, $-CONR^{30}R^{31}$, $-CO(C_{1-6}$ alkyl), $-CO$ heterocyclyl, $-CO$ cycloalkyl, $-CO_2H$, $-CO_2(C_{1-6}$ alkyl), $-CO_2$ (aryl), $-CO_2(NR^{30}R^{31})$, mercapto, $-S(C_{1-6}$ alkyl), $-SO(C_{1-6}$ alkyl), $-SO_2(C_{1-6}$ alkyl), $-SO_2NR^{30}R^{31}$; wherein R^{21} , R^{23} and R^{35} independently of each other may be optionally substituted on carbon by one or more R^{28} and on nitrogen of any moiety that contains an NH by R^{29} ;

R^{26} and R^{28} are each independently selected from halogen, nitro, $-NR^{30}R^{31}$, cyano, isocyano, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, aryl, cycloalkyl, heterocyclyl, hydroxy, keto(=O), $-O(C_{1-6}$ alkyl), $-O$ aryl, $-OCO$ alkyl, $-NHCHO$, $-N(C_{1-6}$ alkyl)CHO, $-NHCONR^{30}R^{31}$, $-N(C_{1-6}$ alkyl)CONR³⁰R³¹, $-NHCO$ alkyl, $-NHCO_2(C_{1-6}$ alkyl); $-NHCO_2H$, $-N(C_{1-6}$ alkyl)CO(C_{1-6} alkyl), $-NHSO_2(C_{1-6}$ alkyl), carboxy, $-amidino$, $-CHO$, $-CONR^{30}R^{31}$, $-CO(C_{1-6}$ alkyl), $-CO$ heterocyclyl, $-CO$ cycloalkyl, $-CO_2H$, $-CO_2(C_{1-6}$ alkyl), $-CO_2$ (aryl), $-CO_2(NR^{30}R^{31})$, mercapto, $-S(C_{1-6}$ alkyl), $-SO(C_{1-6}$ alkyl), $-SO_2(C_{1-6}$ alkyl), $-SO_2NR^{30}R^{31}$;

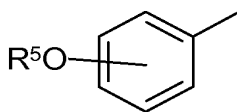
R^{27} and R^{29} are each independently selected from halogen, nitro, $-NR^{30}R^{31}$, cyano, isocyano, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, aryl, cycloalkyl, heterocyclyl, hydroxy, keto(=O), $-O(C_{1-6}$ alkyl), $-O$ aryl, $-OCO$ alkyl, $-NHCHO$, $-N(C_{1-6}$ alkyl)CHO, $-NHCONR^{30}R^{31}$, $-N(C_{1-6}$ alkyl)CONR³⁰R³¹, $-NHCO$ alkyl, $-NHCO_2(C_{1-6}$ alkyl); $-NHCO_2H$, $-N(C_{1-6}$ alkyl)CO(C_{1-6} alkyl), $-NHSO_2(C_{1-6}$ alkyl), carboxy, $-amidino$, $-CHO$, $-CONR^{30}R^{31}$, $-CO(C_{1-6}$ alkyl), $-CO$ heterocyclyl, $-CO$ cycloalkyl, $-CO_2H$, $-CO_2(C_{1-6}$ alkyl), $-CO_2$ (aryl), $-CO_2(NR^{30}R^{31})$, mercapto, $-S(C_{1-6}$ alkyl), $-SO(C_{1-6}$ alkyl), $-SO_2(C_{1-6}$ alkyl), $-SO_2NR^{30}R^{31}$;

R^{30} and R^{31} are each independently selected from halogen, nitro, $-NH_2$, cyano, isocyano, C_{1-6} alkyl, C_{2-6} alkenyl, C_{2-6} alkynyl, aryl, cycloalkyl, heterocyclyl, hydroxy, keto(=O), $-O(C_{1-6}$ alkyl), $-O$ aryl, $-OCO$ alkyl, $-NHCHO$, $-N(C_{1-6}$ alkyl)CHO, $-NHCONR^{11}R^{12}$,

-N(C₁₋₆alkyl)CONR¹¹R¹², -NHCOalkyl, -NHCO₂(C₁₋₆alkyl); -NHCO₂H, -N(C₁₋₆alkyl)CO(C₁₋₆alkyl), -NHCO₂(C₁₋₆alkyl), carboxy, -amidino, -CHO, -CONR³⁰R³¹, -CO(C₁₋₆alkyl), -COheterocyclyl, -COcycloalkyl, -CO₂H, -CO₂(C₁₋₆alkyl), -CO₂(aryl), -CO₂(NR³⁰R³¹), mercapto, -S(C₁₋₆alkyl), -SO(C₁₋₆alkyl), -SO₂(C₁₋₆alkyl), -SO₂NR¹¹R¹²; wherein R³⁰ and R³¹ independently of each other may be optionally substituted on carbon by one or more R³²; and wherein if said heterocyclyl contains a -NH- or NH₂ moiety, the nitrogen of said moiety may be optionally substituted by a group selected from R³⁵;

or a pharmaceutically acceptable salt thereof;

provided that when X is S; Y is CH; R₂ is C(=O)NR⁶R⁷; and R³ is NHC(=O)NHR⁴; then R¹ cannot be



wherein R⁵ is selected from H, optionally substituted carbocyclyl, or optionally substituted C₁₋₆alkyl; with the further proviso that said compound is not

5-Methyl-2-ureido-thiophene-3-carboxylic acid (1-ethyl-piperidin-3-yl)-amide;

[3-((S)-3-Amino-azepan-1-carbonyl)-5-ethyl-thiophen-2-yl]-urea;

2-Morpholin-4-yl-4-ureido-thiazole-5-carboxylic acid (S)-piperidin-3-ylamide;

2-Methyl-5-ureido-oxazole-4-carboxylic acid (S)-piperidin-3-ylamide;

5-(4-Chloro-phenyl)-3-{3-[(R)-1-(2,2,2-trifluoro-acetyl)-piperidin-3-yl]-ureido}-thiophene-2-carboxylic acid (S)-piperidin-3-ylamide; or

N-(3-[[[(3S)-3-aminoazepan-1-yl]carbonyl]-5-pyridin-2-yl-2-thienyl]urea.

2 (original) A compound of formula (I), or a pharmaceutically acceptable salt thereof, according to claim 1, wherein R¹ is selected from cycloalkyl, cycloalkenyl, aryl, and heterocyclyl, provided R¹ is not thienyl; and wherein R¹ may be optionally substituted on one or more carbon atoms by one or more R⁹; and further wherein if said heterocyclyl contains an -NH- moiety, the nitrogen of said moiety may be optionally substituted by a group selected from R¹⁰.

3 (currently amended) A compound of formula (I), or a pharmaceutically acceptable salt thereof, according to claim 1 or 2 wherein R¹ is aryl optionally substituted on one or more carbon atoms by one or more R⁹.

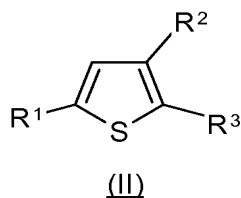
4 (currently amended) A compound of formula(I), or a pharmaceutically acceptable salt thereof, according to claim 1 ~~any one of claims 1-3~~ wherein one of R^2 and R^3 is $-SO_2N R^{16}R^{17}$ and the other is $-NHC(=O)NHR^4$.

5 (currently amended) A compound of formula (I), or a pharmaceutically acceptable salt thereof, according to claim 1 ~~any one of claims 1-4~~ wherein one of R^2 and R^3 is $-C(=O)NR^6R^7$ and the other is $-NHC(=O)NHR^4$.

6 (currently amended) A compound of formula (I), or a pharmaceutically acceptable salt thereof, according to claim 1 ~~any one of claims 1-5~~ wherein one of R^2 and R^3 is $C(=O)NR^6R^7$ and the other is $-NHC(=O)NHR^4$; R^6 is H and R^7 is a 5, 6, or 7-membered heterocyclyl ring containing at least one nitrogen atom; and wherein said heterocyclyl may be optionally substituted on one or more carbon atoms by one or more R^{18} ; and further wherein if said heterocyclyl contains an $-NH-$ moiety, the nitrogen of said moiety may be optionally substituted by a group selected from R^{19} .

7 (currently amended) A compound of formula (I), or a pharmaceutically acceptable salt thereof, according to claim 1 ~~any one of claims 1 to 5~~ wherein R^6 and R^7 taken together with the N to which they are attached form an optionally substituted heterocyclic ring which may be optionally substituted on one or more carbon atoms by one or more R^{18} ; and wherein if said heterocyclyl contains a $-NH-$ moiety, the nitrogen of said moiety may be optionally substituted by a group selected from R^{19} .

8 (currently amended) A compound of formula (II), or a pharmaceutically acceptable salt thereof,



wherein R^1 , R^2 , and R^3 are as defined in ~~any one of claims 1-7~~ claim 1.

9 (currently amended) A compound, or pharmaceutically acceptable salt according to ~~any one of claims 1, 2, 5, 6 and 8~~ claim 1 wherein

R^2 is $-C(=O)NR^6R^7$;

R^3 is $-NHC(=O)NHR^4$;

R^6 is H; R^7 is a 5, 6, or 7-membered heterocyclyl ring containing at least one nitrogen atom; wherein said heterocyclyl may be optionally substituted on one or more carbon atoms by one or more R^{18} ; and further wherein if said heterocyclyl contains an -NH- moiety, the nitrogen of said moiety may be optionally substituted by a group selected from R^{10} ; and

R^1 is selected from cycloalkyl, cycloalkenyl, aryl, and heterocyclyl, provided R^1 is not thienyl; and wherein R^1 may be optionally substituted on one or more carbon atoms by one or more R^9 ; and further wherein if said heterocyclyl contains an -NH- moiety, the nitrogen of said moiety may be optionally substituted by a group selected from R^{19} .

10 (currently amended) A compound, or pharmaceutically acceptable salt thereof, according to ~~any one of claims 1, 2, 5, 6, 8 and 9~~ claim 1 wherein

R^3 is $-C(=O)NR^6R^7$;

R^2 is $-NHC(=O)NHR^4$;

R^6 is H; R^7 is a 5, 6, or 7-membered heterocyclyl ring containing at least one nitrogen atom wherein R^7 may be optionally substituted on one or more carbon atoms by one or more R^{18} ; and wherein if said heterocyclyl contains a -NH- moiety, the nitrogen of said moiety may be optionally substituted by a group selected from R^{19} ; and R^1 is selected from cycloalkyl, cycloalkenyl, aryl, and heterocyclyl, provided R^1 is not thienyl; and wherein R^1 may be optionally substituted on one or more carbon atoms by one or more R^9 ; and further wherein if said heterocyclyl contains an -NH- moiety, the nitrogen of said moiety may be optionally substituted by a group selected from R^{10} .

11 (original) A compound, or pharmaceutically acceptable salt, according to claim 1 selected from

5-(3-Fluoro-phenyl)-3-ureido-thiophene-2-carboxylic acid (S)-piperidin-3-ylamide;

5-Phenyl-2-ureido-thiophene-3-carboxylic acid (S)-piperidin-3-ylamide;

5-(3,5-Difluoro-phenyl)-2-ureido-thiophene-3-carboxylic acid (S)-piperidin-3-ylamide;

5-(4-Fluoro-phenyl)-2-ureido-thiophene-3-carboxylic acid (S)-piperidin-3-ylamide;

5-(4-Chloro-phenyl)-2-ureido-thiophene-3-carboxylic acid (S)-piperidin-3-ylamide;

5-(3-Chloro-phenyl)-2-ureido-thiophene-3-carboxylic acid (S)-piperidin-3-ylamide;

5-[4-(Piperidine-1-carbonyl)-phenyl]-2-ureido-thiophene-3-carboxylic acid (S)-piperidin-3-ylamide;

5-(4-Cyano-phenyl)-3-ureido-thiophene-2-carboxylic acid (S)-piperidin-3-ylamide;

5-[4-(Piperidine-1-carbonyl)-phenyl]-3-ureido-thiophene-2-carboxylic acid (S)-piperidin-3-ylamide;

5-(3,4-Difluoro-phenyl)-3-ureido-thiophene-2-carboxylic acid (S)-piperidin-3-ylamide;
5-(3-Chloro-phenyl)-3-ureido-thiophene-2-carboxylic acid (S)-piperidin-3-ylamide;
5-(2,3-Difluoro-phenyl)-3-ureido-thiophene-2-carboxylic acid (S)-piperidin-3-ylamide;
5-(2,4-Difluoro-phenyl)-3-ureido-thiophene-2-carboxylic acid (S)-piperidin-3-ylamide;
5-(3,5-Difluoro-phenyl)-3-ureido-thiophene-2-carboxylic acid (S)-piperidin-3-ylamide;
5-Phenyl-3-ureido-thiophene-2-carboxylic acid (S)-piperidin-3-ylamide; and
5-(4-Chloro-phenyl)-3-ureido-thiophene-2-carboxylic acid (S)-piperidin-3-ylamide.

12 (canceled)

13 (canceled)

14 (canceled)

15 (currently amended) A method of limiting cell proliferation in a human or animal comprising administering to said human or animal a therapeutically effective amount of a compound of formula (I) or a pharmaceutically acceptable salt thereof, as claimed in ~~any one of claims 1-14~~ claim 1.

16 (currently amended) A method of treatment of a human or animal suffering from cancer comprising administering to said human or animal a therapeutically effective amount of a compound of formula (I) or a pharmaceutically acceptable salt thereof, as claimed in ~~any one of claims 1-14~~ claim 1.

17 (currently amended) A method of prophylaxis treatment of cancer comprising administering to a human or animal in need of such treatment a therapeutically effective amount of a compound of formula (I) or a pharmaceutically acceptable salt thereof, as claimed in ~~any one of claims 1-14~~ claim 1.

18 (currently amended) A method of treatment of a human or animal suffering from a neoplastic disease such as cervical cancer, cancer of the head and neck, carcinoma of the breast, ovary, lung (non small cell), pancreas, colon, prostate or other tissues, as well as leukemias and lymphomas, tumors of the central and peripheral nervous system, and other tumor types such as melanomasarcomas including fibrosarcoma and osteosarcoma, malignant brain tumors, comprising administering to said human or animal a therapeutically

effective amount of a compound of formula (I) or a pharmaceutically acceptable salt thereof, as claimed in ~~any one of claims 1-14~~ claim 1.

19 (currently amended) A method of treatment of a human or animal suffering from a proliferative disease such as autoimmune, inflammatory, neurological, and cardiovascular diseases comprising administering to said human or animal a therapeutically effective amount of a compound of formula (I) or a pharmaceutically acceptable salt thereof, as claimed in ~~any one of claims 1-14~~ claim 1.

20 (currently amended) A method of treating cancer comprising administering to a human a compound of formula (I) or a pharmaceutically acceptable salt thereof, as claimed in ~~any one of claims 1-14~~ claim 1, and an anti-tumor agent.

21 (currently amended) A method of treating cancer comprising administering to a human or animal a compound of formula (I) or a pharmaceutically acceptable salt thereof, as claimed in ~~any one of claims 1-14~~ claim 1, and a DNA damaging agent.

22 (currently amended) A method for the treatment of infections associated with cancer comprising administering to a human or animal in need of such treatment a therapeutically effective amount of a compound of formula (I) or a pharmaceutically acceptable salt thereof, as claimed in ~~any one of claims 1-14~~ claim 1.

23 (currently amended) A method for the prophylaxis treatment of infections associated with cancer comprising administering to a human or animal in need of such treatment a therapeutically effective amount of a compound of formula (I) or a pharmaceutically acceptable salt thereof, as claimed in ~~any one of claims 1-14~~ claim 1.

24 (currently amended) A pharmaceutical composition comprising a compound of formula (I) or a pharmaceutically acceptable salt thereof, as claimed in ~~any one of claims 1-14~~ claim 1, together with at least one pharmaceutically acceptable carrier, diluent or ~~excipient~~ excipient.

25 (canceled)

26 (canceled)

27 (canceled)

28 (canceled)

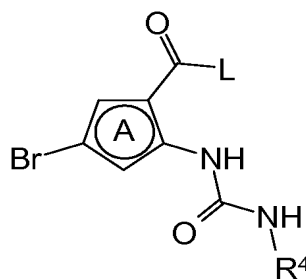
29 (currently amended) A method of inhibiting CHK1 kinase comprising administering to an animal or human in need of said inhibiting a therapeutically effective amount of a compound of formula (I) or a pharmaceutically acceptable salt thereof, as claimed in ~~any one of claims 4-11~~ claim 1.

30 (canceled)

31 (canceled)

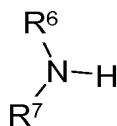
32 (currently amended) A process for the preparation of a compound of formula (I) or a pharmaceutically acceptable salt thereof, as defined in ~~any one of claims 1 to 11~~ claim 1, which comprises:

a. reacting a compound with formula (III) wherein A is thienyl and L is a displaceable group



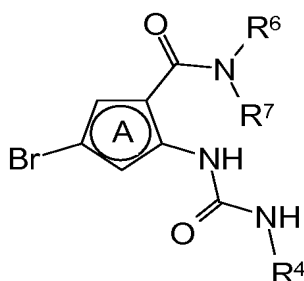
(III)

with an amine of formula (IV);



(IV)

to yield a compound of formula (V)



(V);

b. reacting a compound with formula (V) with a boronic acid or ester

to form a compound of formula (I); and

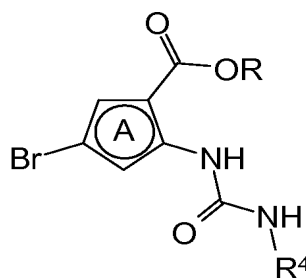
c. optionally

i) converting a compound of the formula **(I)** into another compound of the formula **(I)**;
and/or

ii) forming a pharmaceutically acceptable salt thereof.

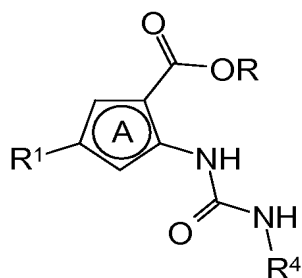
33 (currently amended) A process for the preparation of a compound of formula (I) or a pharmaceutically acceptable salt thereof, as defined in ~~any one of claims 1 to 11~~ claim 1, which comprises:

a. reacting a compound of formula (VII) wherein A is thienyl and R is a hydrocarbon radical;



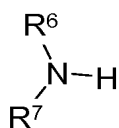
(VII)

with a boronic acid or ester to form a compound of formula (VIII):



(VIII)

b. reacting a compound of formula (VIII) with an amine of formula (IV)



(IV)

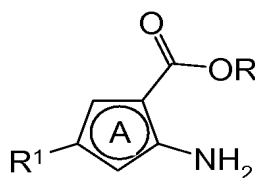
to form a compound of formula (I); and

c. optionally,

- i) converting a compound of the formula **(I)** into another compound of the formula **(I)**;
and/or
- ii) forming a pharmaceutically acceptable salt thereof.

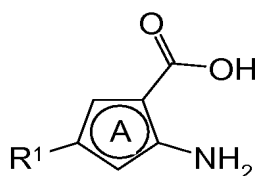
34 (currently amended) A process for the preparation of a compound of formula (I) or a pharmaceutically acceptable salt thereof, as defined in ~~any one of claims 1 to 11~~ claim 1, which comprises:

- a. reacting a compound of formula (IX) wherein A is thienyl and R is a hydrocarbon radical;



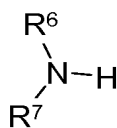
(IX)

with a concentrated hydroxide base to form a compound of formula (X);



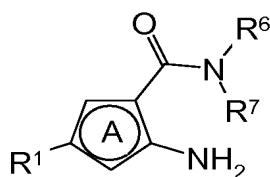
(X)

- b. reacting the compound of formula (X) with an amine of formula (IV)



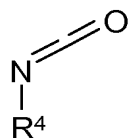
(IV)

to form a compound of formula (XI)

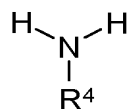


(XI)

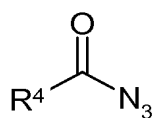
- c. reacting the compound of formula (XI) with a compound selected from compounds of formulas (XII), (XIII) and a carbonylation reagent or (XIV);



(XII)



(XIII)



(XIV)

to form a compound of formula (I); and

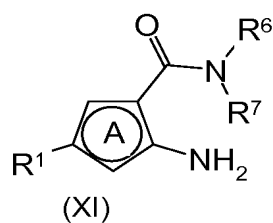
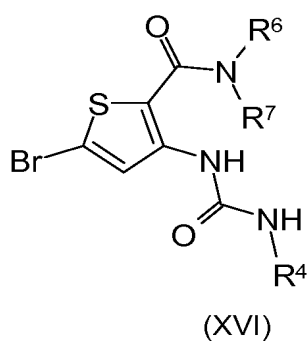
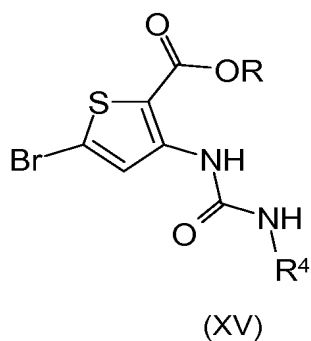
d. optionally,

i) converting a compound of the formula (I) into another compound of the formula (I);

and/or

ii) forming a pharmaceutically acceptable salt thereof.

35 (currently amended) A compound of formula (XV), (XVI) or (XI)



wherein R^1 is aryl and R^4 , R^6 and R^7 are as defined in ~~formula (I)~~claim 1, A is a thienyl ring and R is a hydrocarbon radical and provided that the compound of formula (XI) is not 3-Amino-5-(4-chloro-phenyl)-thiophene-2-carboxylic acid [(1R,2R)-2-(2,4-difluoro-phenyl)-2-hydroxy-1-methyl-3-[1,2,4]triazol-1-yl-propyl]-amide.

36 (canceled)